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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,265	04/24/2001	Jeff Reynar	60001.0049US01/MS#154685.	6007
27488 7590 07/20/2007 MERCHANT & GOULD (MICROSOFT) P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			EXAMINER SPOONER, LAMONT M	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

09/841,265

**Applicant(s)**

REYNAR, JEFF

**Examiner**

Lamont M. Spooner

**Art Unit**

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to all claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1-3, 5, 8-13, 15-17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamakita (US Patent No. 5,956,681) in view of Szabo (US 6,868,525), and further in view of Butler et al. (US 7,082,392).

As per **claim 1**, Yamakita discloses a computer system for applying mode bias to an input field of an electronic document of an application, the system comprising:

a schema registry in communication with the application (Fig. 10-registration table, Fig. 1 item 108, C.16.lines 22-28-application, C.35.lines 62-64); and

an input engine in communication with the schema registry (Fig. 1 item 101-the mobile terminal comprising the input engine is connected to the schema registry, Fig. 10-the registration table, located within Fig. 1 item 108), wherein the schema registry receives a schema name from the application (C.5.lines 45-67-"destination number", "text", "e-mail"), locates a grammar associated with the schema name and sends the grammar to the input engine (C.5.lines 55, 56-formatted text generation section determines acceptable grammar associated with the schema name, "destination number", which is sent to the input engine, C.6.lines 7-19, C.35.lines 62-64), but lacks explicitly teaching the schema registry as a hierarchical based schema registry, and a hierarchical analysis to the input field.

However, Szabo teaches having a hierarchical schema registry (C.21.lines 33-56) and hierarchical analysis to the input field (ibid, Fig. 1A). Therefore, at the time of the invention, it would have been obvious to modify Yamakita by having a hierarchical schema registry. The motivation for doing so would have been to provide an organization of query responses (C.21.lines 46, 47).

Yamakita with Szabo fail to explicitly disclose, a grammar having a language setting, a locale setting. However, Butler teaches a grammar

having a language setting, and a locale setting (C.7.lines 62-67). Therefore, at the time of the invention, it would have been obvious to one ordinarily skilled in the art to modify Szabo with Yamakita's registry with a grammar having a language setting, and a locale setting, providing the benefit of having an entry text specific to a language and locale for use by a speech recognition and text field formatting entry (Butler, C.5 lines 50, 51, C.8 lines 7, 8).

As per **claims 2, 3, and 5**, Yamakita, Szabo and Butler make obvious all of the limitations of claim 1, upon which claims 2, 3 and 5 depend.

Yamakita further discloses:

the input engine is a speech recognition engine (C.1.lines 33-67).

the input engine is a handwriting recognition engine (ibid).

the input engine is keypad of a cellphone (ibid).

As per **claim 8**, Yamakita , Szabo and Butler make obvious all of the limitations of claim 1, upon which claim 8 depends. Yamakita further discloses:

the schema registry comprises a schema database (C.35.lines 12, 13-schema registry/database) and a grammar database (C.35.lines 23-31-the grammar database (format type field dictionary-acceptable input in units

of format types), wherein the schema database comprises a plurality of schema names (Fig. 10- "format type" database-is interpreted as the schema database comprising a plurality of schema names "e-mail", "destination number", "text", C.35.lines 62-64), and a plurality of pointers to grammars (C.33.line 60-C.34.line 16, C.35.lines 25-31-format type registration table points to the format type field dictionary, which in turn searches the recognized data for field specific units corresponding and registered as a keyword for the field) associated with the plurality of schema names and wherein the pointers point to the grammar database comprising a plurality of grammars (C.35.lines 11-21-pointing/referencing to format type field dictionary interpreted as the grammar database comprising a plurality of grammars), but lacks the schema registry as a hierarchical schema registry. However, Szabo teaches having a hierarchical schema registry (C.21.lines 33-56, Fig. 1A). Therefore, at the time of the invention, it would have been obvious to modify Yamakita by having a hierarchical schema registry. The motivation for doing so would have been to provide an organization of query responses (C.21.lines 46, 47).

As per **claim 9**, Yamakita, Szabo and Butler make obvious all of the limitations of claim 1, upon which claim 9 depends. Yamakita further discloses:

the grammar is a context free grammar (C.33.lines 60-65-clause dependent grammar).

As per **claim 10**, Yamakita, Szabo and Butler make obvious all of the limitations of claim 1, upon which claim 10 depends. Yamakita further discloses:

the grammar is a context sensitive grammar (C.33.lines 66, 67, C.34.line 1).

As per **claim 11**, Yamakita, Szabo and Butler make obvious all of the limitations of claim 1, upon which claim 11 depends. Yamakita further discloses:

the grammar is a regular expression (C.35.lines 35, 36-regular expression grammar)

As per **claim 12**, Yamakita, Szabo and Butler make obvious all of the limitations of claim 1, upon which claim 12 depends. Yamakita further discloses:

the grammar is a statistical language model (C.33.lines 53-59).

As per **claim 13**, Yamakita, Szabo and Butler make obvious all of the limitations of claim 1, upon which claim 13 depends. Yamakita further discloses:

the grammar defines an appropriate input for the input field (C.36.lines 15-36).

As per **claim 15**, Yamakita, Szabo and Butler make obvious all of the limitations of claim 1, upon which claim 15 depends. Yamakita further discloses:

the input engine uses the grammar to receive input from a user of the application (C.36.lines 33-36-the input engine uses the grammar rule defining acceptable text to receive input, C.35.lines 35-37, from the user).

As per **claim 16**, Yamakita, Szabo and Butler make obvious all of the limitations of claim 15, upon which claim 16 depends. Yamakita further discloses:

the input engine further uses the grammar to bias the user's input toward a correct input for the input field (C.36.lines 1-36-correct input comprising an email address, biased by format and unnecessary word deletion).



As per **claim 17**, Yamakita, Szabo and Butler make obvious all of the limitations of claim 15, upon which claim 17 depends. Yamakita further discloses:

the input engine compares the input of the user (C.35.lines 35-37) to the grammar (C.35.lines 22-31, 43-51-comparative step) to determine whether the input matches and is an appropriate input (C.36.lines 20-36).

As per **claim 19**, Yamakita, Szabo and Butler make obvious all of the limitations of claim 1, upon which claim 19 depends. Yamakita further discloses:

the schema registry is in communication with the application through a text service framework (Fig. 1 item 108, 101-C.1.line 63-C.2.line 8-stochastic input text interfaced with mobile terminal), but lacks the schema registry as a hierarchical schema registry.

However, Szabo teaches having a hierarchical schema registry (C.21.lines 33-56, Fig. 1A-see claim 1). Therefore, at the time of the invention, it would have been obvious to modify Yamakita by having a hierarchical schema registry. The motivation for doing so would have been to provide an organization of query responses (C.21.lines 46, 47).

4. Claim 20-22, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamakita (US Patent No. 5,956,681) in view of Szabo (US 6,868,525).

As per **claim 20**, Yamakita discloses a computer system for applying mode bias to an input field of an electronic document of an application, the system comprising:

a schema registry connected to the application (Fig. 10-registration table, Fig. 1 item 108, C.16.lines 22-28-application, C.35.lines 62-64), wherein the schema registry operable to point to code for dynamically generating one or more grammars (C.35.lines 43-64-his format type field generation as for dynamically generating one or more grammars, and the format type is located in the schema registry-Fig. 10, which points to code for "E-mail", C.9.lines 49-53-his control program, and C.35.lines 62-64-his coping with various schema), wherein the one or more grammars are used to identify an input method (Yamakita explicitly teaches wherein the one or more grammars are used to identify an input method, C.10.lines 1-60 (his determination processing), C.8.lines 13-15, and Fig. 4, the ranked list of mode bias schema, in order, from item 401, 405, 406, 407, 409, each is listed in order, all comprising mode bias schema, and non-concurrent,

which comprises by inherent order, first, second, third, etc. interpreted as their ranking by order); and

an input engine in communication with the schema registry (Fig. 1 item 101-the mobile terminal comprising the input engine is connected to the schema registry, Fig. 10-the registration table, located within Fig. 1 item 108), wherein the schema registry receives a schema name from the application (C.5.lines 45-67-"destination number", "text", "e-mail"), locates an identifier of a grammar (C.36.lines 1-5) associated with the schema name and sends the identifier of the grammar to the input engine (C.5.lines 55, 56-formatted text generation section determines acceptable grammar associated with the schema name, "destination number", which is sent to the input engine, C.6.lines 7-19, C.35.lines 62-64, C.36.lines 30-36-the identifier of a grammar is sent to the input engine, in order for the text to be input in a predetermined text format), but lacks the schema registry being a hierarchical schema registry. However, Szabo teaches having a hierarchical schema registry, and wherein a grammar is associated with a highest ranked schema (C.21.lines 33-56, Fig. 1A, wherein the top of the hierarchy is interpreted as the highest ranked schema, and the grammar as the query, wherein the association is inherent search relation through the

hierarchical element, thereby associated therewith). Therefore, at the time of the invention, it would have been obvious to modify Yamakita by having a hierarchical schema registry. The motivation for doing so would have been to provide an organization of query responses (C.21.lines 46, 47).

As per **claim 21**, Yamakita discloses a computer-implemented method for applying mode bias to an input field of an electronic document of an application program module, the method comprising the steps of:

determining that an insertion point is within the input field (C.36.lines 34, 35-inherent for insertion into an appropriate field);

determining a mode bias schema that is attached to the input field (C.35.lines 11-31-format type name registry, C.36.lines 20-36),

dynamically generating one or more grammars based on the input field and a schema registry (C.35.lines 43-64-his format type field generation as for dynamically generating one or more grammars, and the format type is located in the schema registry-Fig. 10, which points to code for "E-mail", C.9.lines 49-53-his control program, and C.35.lines 62-64-his coping with various schema);

determining a grammar that is associated with the mode bias schema (C.35.lines 15-21-format type field dictionary); and

sending the grammar to an input engine wherein the input engine uses the grammar to receive input for the input field (C.5.lines 55, 56-formatted text generation section determines acceptable grammar associated with the schema name, "destination number", which is sent to the input engine, C.6.lines 7-19, C.35.lines 62-64), but lacks the schema registry being a hierarchical schema registry, and wherein the determination of a mode bias schema uses a ranked list of mode bias schemas associated with an input method. However, Szabo teaches having a hierarchical schema registry, wherein the determination of a mode bias schema uses a ranked list of mode bias schemas associated with an input method (C.21.lines 33-56, Fig. 1A his input and hierarchy-wherein the ranking is interpreted as the highest node of the hierarchy). Therefore, at the time of the invention, it would have been obvious to modify Yamakita by having a hierarchical schema registry. The motivation for doing so would have been to provide an organization of query responses (C.21.lines 46, 47).

As per **claim 22**, Yamakita and Szabo make obvious all of the limitations of claim 21, upon which claim 22 depends. Yamakita further discloses:

the input engine uses the grammar to receive input for the input field comprises receiving text at the insertion point (C.36.lines 20-36-predetermined field is the insertion point) and determining whether the received text (C.35.lines 32-47-received text) matches an input type defined by the grammar (C.36.lines 20-30-determination that the grammar matches an email grammar) and, if so, then displaying the text in the input field (C.36.lines 33-36, C.6.lines 16-18).

As per **claim 24**, Yamakita and Szabo make obvious all of the limitations of claim 21, upon which claim 24 depends. Yamakita further discloses:

cross-referencing the mode bias schema in a schema database to determine the grammar that is associated with the mode bias schema (C.35.line 11- C.36.line 5-searching through the mode bias schema for a grammar through the mode bias schema is interpreted as cross-referencing, C.35.lines 11-30, in the schema database indicates/points the/to grammar that is associated with the mode bias schema).

As per **claim 25**, Yamakita and Szabo make obvious all of the limitations of claim 24, upon which claim 25 depends. Yamakita further discloses:

the step of sending the grammar to an input engine comprises retrieving the grammar from a grammar database (C.35.lines 21-31-grammar is retrieved from the format type dictionary grammar database) and sending the grammar to the input engine (C.36.lines 11-36).

As per **claim 26**, Yamakita and Szabo make obvious all of the limitations of claim 25, upon which claim 26 depends. Yamakita further discloses:

a computer-readable medium on which are stored computer-readable instructions which, when executed, perform the method claim 25 (C.9.lines 14-21, C.42.lines 29-46).

5. Claims 4, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamakita in view of Szabo in view of Butler, as applied to claim 1 above, and further in view of Fisher (US 2001/0041328)

As per **claims 4, 6, and 7**, Yamakita, Szabo and Butler make obvious all of the limitations of claim 1, upon which claims 4, 6, and 7 depend, but the above combination lack explicitly disclosing:

the input engine is an input method editor;

the input engine is gesture-based input method;

the input engine is a \*sign language recognition engine;

However, Fisher teaches having an input method editor, gesture based input method, and a sign language recognition engine (p.3. [0036], [0039]- [0041])

Therefore, at the time of the invention, it would have been obvious to modify the combination of Szabo, Butler and Yamakita with multiple input engines, and recognition of these input methods. The motivation for doing so would have been to have multiple forms of input which would provide the obvious benefit of expanded input methods, for example to accommodate disabled persons.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamakita in view Szabo in view of Butler, as applied to claim 1 above, and further in view of De La Huerga (US Patent No. 6,434,567).

Yamakita, Szabo and De La Huerga are analogous art in that they involve text input schema for structured text.

As per **claim 14**, Yamakita, Szabo and Butler make obvious all of the limitations of claim 13, upon which claim 14 depends but the above combination lacks the grammar defines an appropriate input for the input field by defining a list of acceptable inputs for the input field.



However, De La Huerga teaches having a grammar define an appropriate input for a field by defining a list of acceptable inputs for the input field (C.10.lines 7-17). Therefore, at the time of the invention, it would have been obvious to one ordinarily skilled in the art to modify the combination of Szabo, Butler and Yamakita by including in a predetermined field grammar rule a list of acceptable inputs for the input field. The motivation for doing so would have been to account for various input patterns (De La Huerga, C.10.lines 15-17).

7. Claims 18 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamakita in view of Szabo, in view of Butler, as applied to claim 1 above, and further in view of De La Huerga (US Patent No. 5,895,461).

Yamakita, Szabo and De La Huerga are analogous art in that they involve text input schema for structured text.

As per **claim 18**, Yamakita, Szabo and Butler make obvious all of the limitations of claim 17, upon which claim 18 depends. Yamakita further discloses if the input engine determines that the input of the user does not match an appropriate input, then the input engine rejects the input (C.35.lines 32-47, C.36.lines 6-36-for appropriate input, unnecessary words

are deleted for appropriate input into fields), but the above combination lacks causing the application to display an error message to the user.

However, De La Huerga teaches display an error message to the user if an input does not match an appropriate input (C.6.lines 50-55). Therefore, at the time of the invention, it would have been obvious to one ordinarily skilled in the art to modify the combination of Szabo, Butler and Yamakita by indicated an error message for improper information entry. The motivation for doing so would have been to alert the user of error in an input for a specified format field (C.6.lines 51-55).

As per **claim 23**, Yamakita and Szabo make obvious all of the limitations of claim 22, upon which claim 23 depends.

Claim 23 sets forth limitations similar to claim 18. Claim 18 describes the limitations as indicated there.

8. Claims 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamakita in view of Bays et al. (hereinafter referred to as Bays, US Patent No. 6,519,603) in further view of Szabo.

Yamakita, Bays and Szabo are analogous art in that they involve text input schema for structured text.

As per **claim 27**, Yamakita discloses a computer-implemented method for determining a semantic category of a string in an electronic document based upon a mode bias schema comprising:

receiving an input string in the electronic document (C.5.lines 45-50),  
dynamically generating one or more grammars based on the input string (C.35.lines 43-64-his format type field generation as for dynamically generating one or more grammars, and the format type is located in the schema registry-Fig. 10, which points to code for "E-mail", C.9.lines 49-53-his control program, and C.35.lines 62-64-his coping with various schema, C.35.lines 43, 45-upon receiving as the input string),

retrieving a mode bias schema and an associated grammar (C.5.lines 55, 56-formatted text generation section determines acceptable grammar associated with the schema name, "destination number", which is sent to the input engine, C.6.lines 7-19, C.35.lines 62-64), the mode bias schema associated with a schema registry (ibid-wherein his format and format type are located in the registry, Fig. 10);

determining whether the string conforms to the definition of input defined by the grammar (C.35.lines 22-31, 43-51-determining step, C.36.lines 20-36);

if so, then associating the mode bias schema with the input string in the document (C.35.lines 43-64);

but lacks disclosing saving the mode bias schema as a semantic category label in association with the input string.

However, Bays teaches saving a mode bias schema as a semantic category in association with a string (C.2.line 38-C.3.line 57, for further detail, see C.8.lines 20-25-which explicitly discusses the schema as it relates to the previous recited section involving the semantic category and annotations of data input by a user, and storing/saving thereof.) Therefore, at the time of the invention, it would have been obvious to one ordinarily skilled in the art to Yamakita with Bays by storing a mode bias schema as a semantic category label in associating with a string. The motivation for doing so would have been to enhance semantic interpretations as well as provide order/structure for uses to enter information (C.2.lines 47-50).

Yamakita and Bays lack having the schema registry as a hierarchical based schema registry, wherein the retrieving of the mode bias schema uses a ranked list of mode bias schemas associated with an input method. However, Szabo teaches having a hierarchical schema registry, wherein the retrieving of the mode bias schema uses a ranked list of mode bias

schemas associated with an input method (C.21.lines 33-56, Fig. 1A his input and hierarchy, wherein the ranking is interpreted as the node levels of the hierarchy). Therefore, at the time of the invention, it would have been obvious to modify Yamakita by having a hierarchical schema registry. The motivation for doing so would have been to provide an organization of query responses (C.21.lines 46, 47).

As per **claim 28**, Yamakita, Bays and Szabo make obvious all of the limitations of claim 27, upon which claim 28 depends.

Bays also teaches displaying a plurality of actions in association with a semantic category label (C.3.lines 34-39-comment action, and URL action is displayed in association with every annotated semantic category label).

As per **claim 29**, Yamakita, Bays and Szabo make obvious all of the limitations of claim 27, upon which claim 29 depends. Yamakita further discloses:

the mode bias schema and the associated grammar are retrieved from a schema registry (Fig. 10, C.35.lines 11-64-registry contains the mode bias schema, format type name, and associated grammar format type field dictionary).

9. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamakita in view Bays, in view of Szabo and further in view of Friedman (US Patent No. 6,182,029).

Yamakita and Friedman are analogous art in that they involve schema for structured text.

As per **claim 30**, Yamakita, Bays and Szabo make obvious all of the limitations of claim 27, upon which claim 30 depends, but lack:

the mode bias schema comprises an XML schema.

However, Friedman teaches having XML schema which represents a mode bias towards inputted information (Fig. 4 item 400). Therefore, at the time of the invention, it would have been obvious to one ordinarily skilled in the art to modify Yamakita with Friedman by using XML for schema definition. The motivation for doing so would have been to render appropriate text to users using XML, which is a computational less complex markup language than other encoding languages (C.11.line 57-C.12.line 4).

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

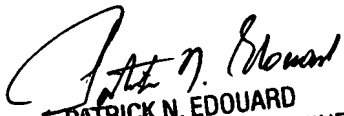
- Nakao (US 2005/0094850) teaches having a grammar associated with a highest ranked schema, wherein the grammar is sent to an input engine.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lamont M. Spooner whose telephone number is 571/272-7613. The examiner can normally be reached on 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on 571/272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

lms  
6/28/07

  
PATRICK N. EDOUARD  
SUPERVISORY PATENT EXAMINER